

We claim:

1. Electrically resistant-heated fiberizing bushings made from an electrically conductive material and comprising an orifice plate or a tip plate, a wall attached to each end and/or side of the tip plate or orifice plate and two ears spaced apart and integral with or attached to the external surface of the wall(s) of the bushing, each ear for attaching to an electrical terminal clamp, the improvement comprising that each ear contains at least one generally V shaped notch at or near an unattached end of the ear.

2. The bushing of claim 1 wherein the wall comprises two opposed endwalls, and two opposed sidewalls and wherein the cross sectional area of each ear increases from the unattached end of the ear towards the end of the ear that is attached to the wall.

3. The bushing of claim 2 wherein each ear is attached to the external surface of each endwall.

4. The bushing of claim 1 wherein at least one of the ears is attached to the external surface of each sidewall.

5. The bushing of claim 2 wherein each ear contains at least 3 generally V shaped notch therein.

6. The bushing of claim 2 wherein each ear contains at least 4 generally V shaped notches therein.

7. The bushing of claim 2 wherein each ear contains 5 or more generally V shaped notches therein.

8. The bushing of claim 2 wherein each ear has two or more generally V shaped notches therein with the widest portion of the notch being at or near an unattached end of the ear.

9. The bushing of claim 8 wherein the distance at the unattached end of the ear from either side of the ear to the side of the closest generally V shaped notch is greater than the distance at the unattached end of the ear between adjacent sides of two of the adjacent generally V shaped notches.

10. The bushing of claim 9 wherein the cross sectional area of each ear at the unattached end is substantially less than 50 percent of what the cross sectional area would be if the ear had no notches.

11. Electrically resistant-heated fiberizing bushings made from an electrically conductive material and comprising an orifice plate or a tip plate, a wall attached to each edge of the tip plate or orifice plate and an ear integral with or attached to the external surface of each of two opposed walls of the bushing for attaching to an electrical terminal clamp, each ear having an increasing cross sectional area along a portion of its length from the unattached end portion towards the wall, the improvement comprising that each ear has one or more generally V shaped notch in the ear with the widest portion of each V shaped notch being close to or at the unattached end of the ear with the at least one V shaped notch being located in that portion of the ear that attaches to the electrical terminal clamp.

12. The bushing of claim 11 comprising two opposed endwalls and two opposed sidewalls.

13. The bushing of claim 12 wherein an ear is integral with or attached the external surface of each endwall.

14. The bushing of claim 11 wherein at least one ear is integral with or attached to the external surface of each sidewall.

15. The bushing of claim 13 wherein each ear contains at least 3 generally V shaped notches.

16. The bushing of claim 13 wherein each ear contains at least 4 generally V shaped notches.

17. The bushing of claim 13 wherein each ear contains at least 5 generally V shaped notches.

18. The bushing of claim 17 wherein the distance at the unattached end of the ear from either side of the ear to the side of the closest generally V shaped notch is greater than the distance at the unattached end of the ear between adjacent sides of two generally adjacent generally V shaped notches.

19. The bushing of claim 17 wherein the cross sectional area of each ear at or near the unattached end is substantially less than 50 percent of what the cross sectional area would be if the ear had no notches.

20. The bushing of claim 18 wherein the cross sectional area of each ear at or near the unattached end is substantially less than 50 percent of what the cross sectional area would be if the ear had no notches.

21. The bushing of claim 17 wherein the included angle in each of the generally V shaped notches is in the range of about 15 to about 37 degrees.

22. Electrically resistant-heated fiberizing bushings made from an electrically conductive material and comprising an orifice plate or a tip plate, one or more sidewalls attached to the tip plate and an endwall attached to each end of the tip plate or orifice plate and an ear integral with or attached to the external surface of each endwall or sidewall of the bushing for attaching to an electrical terminal clamp, each ear having an increasing cross sectional area along a portion of its length from the unattached end portion towards the endwall, the improvement comprising that each ear has three or more generally V shaped notches in the ear with the widest portion of each V shaped notch being close to or at the unattached end of the ear.

23. Electrically resistant-heated fiberizing bushings made from an electrically conductive material and comprising an orifice plate or a tip plate, one or more sidewalls attached to the tip plate and an endwall attached to each end of the tip plate or orifice plate and an ear integral with or attached to the external surface of each endwall or sidewall of the bushing for attaching to an electrical terminal clamp, each ear having an increasing cross sectional area along a portion of its length from the unattached end portion towards the endwall, the improvement comprising that each ear has four or more generally V shaped openings or notches in the ear with the widest portion of each V shaped notch being close to or at the unattached end of the ear.

24. The bushing of claim 23 wherein each ear has five generally V shaped openings or notches therein.

25. The bushing of claim 24 wherein the distance at the unattached end of the ear from either side of the ear to the side of the closest generally V shaped notch is greater than the distance at the unattached end of the ear between adjacent sides of two of the generally adjacent generally V shaped notches.

26. The bushing of claim 25 wherein the cross sectional area of each ear at or near the unattached end is substantially less than 50 percent of what the cross sectional area would be if the ear had no notches.

27. The bushing of claim 26 wherein the included angle in each of the generally V shaped notches is in the range of about 15 to about 37 degrees.

28. The bushing of claim 27 wherein the included angle in each of the generally V shaped notches is in the range of about 25 to about 33 degrees.

29. A method of making fibers by passing a molten material through an electrically resistant-heated fiberizing bushing made from an electrically conductive material and comprising an orifice plate or a tip plate, a wall attached to each end or side of the tip plate or orifice plate and an ear integral with or attached to the external surface of each wall of the bushing for attaching to an electrical terminal clamp, to form fibers, the improvement comprising that each ear contains at least one generally V shaped notch therein at or near the unattached end of the ear.

30. The method of claim 29 wherein cross section area of each ear increases from the unattached end towards the end attached to the wall.

31. A method of making fibers from a molten material by passing the molten material through an electrically resistant-heated fiberizing bushing made from an electrically conductive material and comprising an orifice plate or a tip plate, one or more sidewalls attached to the tip plate and an endwall attached to each end of the tip plate or orifice plate and the sidewalls and an ear integral with or attached to the external surface of each endwall or sidewall of the bushing for attaching to an electrical terminal block, each ear having an increasing cross sectional area along a portion of its length from the unattached end portion towards the endwall, to form the fibers, the improvement comprising that each ear has three or more generally V shaped openings or notches in the ear with the widest portion of each V shaped notch being close to or at the unattached end of the ear.

32. A method of making fibers from a molten material by passing the molten material through an electrically resistant-heated fiberizing bushing made from an electrically

conductive material and comprising an orifice plate or a tip plate, one or more sidewalls attached to the tip plate and an endwall attached to each end of the tip plate or orifice plate and the sidewalls and an ear integral with or attached to the external surface of each endwall or sidewall of the bushing for attaching to an electrical terminal block, each ear having an increasing cross sectional area along a portion of its length from the unattached end portion towards the endwall, to form the fibers, the improvement comprising that each ear has five or more generally V shaped notches in the ear with the widest portion of each V shaped notch being close to or at the unattached end of the ear, each generally V shaped notch or opening having an included angle in the range of about 15 and 35 degrees, wherein the distance at the unattached end of the ear from either side of the ear to the side of the closest generally V shaped notch or opening is greater than the distance at the unattached end of the ear between adjacent sides of two of the generally adjacent generally V shaped notches and wherein the cross sectional area of each ear at the widest portion of the generally V shaped notches or openings is substantially less than 50 percent of what the cross sectional area would be if the ear had no generally V shaped notches.